

Amendments to the Specification

Please amend para. [0013] as follows:

-- The present invention achieves the above-mentioned need by means of the described system using a suitable electronic circuit and an appropriate method which allows the central unit to deduce the relative arrangement of the individual modules. The system and the method are compatible with industry standards such as Controller Area Network ("CAN") busses and can thus be used without difficulty in commercial systems. As a result of the method used it is not necessary to allocate addresses by means of serial busses in which a reset of the system is required. Hence, the user can easily integrate the method in commercial systems without requiring complicated additional measures. --.

Please amend para. [0028] as follows:

-- Due to the fact that the communication or power supply are line-bound, the method allows the topology of the system to be determined particularly simply in a typical embodiment. In this case at least some of the modules are connected in series. In this connection it is, for example, conceivable that the modules are arranged linearly relative to the central unit. However, it is also for example possible to have a star topology with a central unit at the center. As a consequence, when a contact between a module and the central unit is interrupted, all modules which from the viewpoint of the central unit are on the other side of the interruption point, are disconnected from the central unit. Hence, the interruption can be achieved by interrupting the power supply and/or the communication line. It is of course also possible to use line-bound means to contact the modules if it proves to be appropriate. Under these circumstances the power supply as well as the communication is line-bound. However, care should be taken that at least some of the modules are connected in series by suitable means in

such a manner that this enables a predetermination of the modules relative to one another. --.

Please amend para. [0044] as follows:

-- Figure 3 again illustrates the individual steps of the communication protocol (50) that are suitable for determining the topology of the analytical system. If the analytical system is activated by the user, the central unit (1) firstly has information about which possible modules can be maximally present in an analytical system. Since the number of modules that are present varies depending on needs and the user, the central unit firstly makes a query (41) in the loop (40) in order to initially determine the modules that are actually present in the system but without taking into account the topology. In this process the respective address A_i of a module is checked by the query (41) to determine whether it is present in the system. The modules that are actually present respond in step (42) so that the address A_i of the respective module M_i is registered. The queries of loop (40) are repeated until all maximum possible addresses A_i have been checked. In the following loop (43) all actually present modules are queried with regard to their identification I_i (step 44) in order to for example enable a characterization of an analytical system as a blood sugar measuring instrument. Now the central unit knows all modules M_i that are actually present, their addresses A_i and their identification I_i . In order to determine the topology of the individual modules an iteration is performed over all addresses of the modules in a second large loop (45). The central unit commands each of the modules in step (46) to interrupt the connection to their contacted module on their side facing away from the central unit. The central unit then determines which modules can still be addressed by means of a query (47) and compares the registered identifications before and after interruption of a contact. On the basis of these data the central unit can successively determine the relative spatial position of all modules that are present in step (48). --.